Newland AIDC
SCANNING MADE SIMPLE



FR50 Pearl

Presentation Scanners

1D & 2D | EasySet | Infrared | IP42 | Megapixel | USB

Warranty
5 Years







Features

Megapixel Barcode Scanner
Armed with Newlands cutting-edge 2D megapixel barcode technology, the FR50 Pearl has an excellent scanning performance on 1D and 2D barcodes. Its higher resolution means even small barcodes can be read from a longer distance. Inverse and rectangular 2D codes, even if printed with challenges, are no issue.

Sophisticated design.
Designed to be the jewel in the crown, the FR50 Pearl is made with high-quality materials and presented to be the next generation scanner. As a stunner in both in black or white (project only), it blends into its environment perfectly, or can function as a true eyecatcher. The stationary scanner is particularly suited to non-food retail or boutique point-of-sale countertops.

IR & light sensors.
The FR50 Pearl has an excellent combination of both an IR sensor and a light sensor. The light sensor works best in well-lit conditions, sensing the changes in light as a barcode is presented to it. The IR sensor has a shorter range but activates the scanner even in a poorly lit environment.

Automatic Exposure Control (AEC)
The sensor in the FR50 Pearl automatically adjusts the duration of the light it projects, adapting to the glare reflected back off the barcode. Switching from scanning a code printed low-contrast on paper to scanning codes presented on highly reflective phone screens, is no issue. This makes the Pearl a great solution for customer-facing applications.

Mount anywhere.
The FR50 Pearl's magnetic socket clamps easily and firmly to a variety of mounting options. Offering not only versatility in mounting style and function, the simple design of the scanner's connection point also makes for effortless cleaning with our recommended cleaning solutions.

Safe aiming.
Whether staff-attended or self-service, the FR50 Pearl uses safe LED aiming to help position the presented barcodes without any of the health risks associated with laser-class aiming solutions.

5 Years Full Warranty

EasySet

TECHNICAL SPECIFICATIONS

FR50 Pearl

Data Capture

1D	All major 1D symbologies, including EAN-13, EAN-8, UPC-A, UPC-E, Code 128, Code 39, Codabar, UCC/EAN 128, RSS, ITF, ITF-14, ITF6, Standard 25, Matrix 25, COOP 25, Industrial 25, Plessey, MSI Plessey, Code 11, Code 93, Code 49, Code 16K.
2D	All major 2D symbologies, including PDF417, QR Code, Data Matrix, AZTEC, CSC, Maxicode, Micro QR, Micro PDF417, GM, Code One.
Aiming	Green LED
Depth of Field Code 39 (5mil)	80 mm - 170 mm
Depth of Field DataMatrix (10mil)	50 mm - 170 mm
Depth of Field EAN 13 (13mil)	55 mm - 360 mm
Depth of Field PDF417 (6.67mil)	55 mm - 160 mm
Depth of Field QR (15mil)	40 mm - 210 mm
Field of View Horizontal	51°
Field of View Vertical	32°
Illumination	Red LED
Image Sensor	1280 x 800 CMOS
Minimal Print Contrast	30%
Scan Angle Pitch	±55°
Scan Angle Roll	360°
Scan Angle Skew	±55°
Scan Modes	Sense Mode, Continuous Mode

Physical

Current @ 5VDC Operating	306 mA (typical), 311.5 mA (max)
Current @ 5VDC Standby	173.9 mA
Dimensions	Scanner: 68(W) x 61.8(D) x 68.2(H) mm, Stand: 75(W) x 75(D) x 153.5(H) mm
Input Voltage	5 VDC ±5%
Interfaces	USB-HID, USB-CDC
Notifications	Beep, LED
Power Consumption	1530 mW (typical)
Weight	Scanner: 202 g, Stand: 324 g

Environmental

Electro Static Discharge (ESD)	±14 kV (air discharge), ±8 kV (direct discharge)
Humidity	5% to 95% (non-condensing)
IP Rating	IP42
Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)

Software

Configuration Tools	EasySet

Certifications

Certifications Hardware	FCC Part15 Class B, CE EMC Class B, RoHS, IEC 62471

Warranty

Warranty Standard	5 Years

Accessories

Accessories Standard	Desktop stand, USB cable, Mounting plate

What's in the box?

NLS-FR5080-B-20	FR50 Pearl, 2.80 meter direct USB cable, Stand, Mounting plate

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Newland AIDC EMEA
Feel free to contact us or a partner near you.
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